

REMARKS

1. Claims 1-29 have been cancelled and replaced by new claims 30-170.

Claims 30-116 are directed to a method for synthesizing a templated molecule.

Claims 117-145 are directed to a method for generating a library of different bifunctional complexes. These claims are dependent on claim 30, the synthesis of the templated molecule being a step in library generation.

Claims 146-165 are directed to "a bifunctional complex" which is "obtainable by the method of claim 30."

Claims 166-170 are directed to a library of different bifunctional complexes according to claim 146.

2. The rejection of claims 1-29 for indefiniteness is moot in view of the cancellation of those claims. However, it is helpful to compare new claim 30 with former claim 1 (amended March 17, 2005) in order to understand why the rejection should not be applied to new claim 30.

| New Claim 30 | Old Claim 1 |
|---|---|
| a) providing at least one template comprising of one or more codons, | a) providing at least one template comprising one or more codons, |
| b) providing a first functional entity attached to a first zipping oligonucleotide capable of reversible interaction with a second zipping oligonucleotide, | b) providing a first functional entity attached to a zipping domain, said zipping domain comprising a first part of a molecule pair, said first part being capable of reversible interaction with a second part of the molecule pair, |

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| <p>c) providing one or more building blocks, each building block comprising a further functional entity linked to an anti-codon by a linker,</p> <p>wherein the anti-codon complements a codon of the template,</p> <p>wherein the further functional entity is connected to the second zipping oligonucleotide capable of reversible interaction with the first zipping oligonucleotide attached to the first functional entity provided in step b), and</p> <p>wherein the further functional entity is capable of being chemically connected to the first functional entity provided in step b),</p> | <p>c) providing one or more building blocks, each comprising an anti-codon, a further functional entity and a linker connecting the anti-codon and the functional entity, wherein the anti-codon complements a codon of a template, and the functional entity is connected to a zipping domain comprising the second part of said molecule pair and is capable of being chemically connected to the first functional entity,</p> |
| <p>d) contacting the components provided in steps a), b), and c) with each other under conditions allowing for i) specific hybridization of building block anti-codon(s) to the codon(s) of the template(s) and ii) dimerization of two zipping oligonucleotides attached to different functional entities,</p> | <p>d) contacting the components of step a), b), and c) with each other under conditions allowing specific hybridization of the anti-codon(s) to the codon(s) of the template(s) and dimerization of the two parts of the molecule pair,</p> |
| <p>e) allowing a further functional entity of the one or more building blocks provided in step c) to form a chemical connection to the first functional entity provided in step b), and</p> | <p>e) allowing the functional entity of the building block to form a chemical connection to the first functional entity,</p> |

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| [no parallel paragraph] | f) optionally, cleaving one or more linkers, provided that at least one linker remains to connect the functional entities with the template, |
| f) obtaining a templated molecule attached to the template which directed the synthesis thereof. | g) obtaining a templated molecule attached to the template which directed the synthesis thereof. |

It can be seen that paragraph (b) now refers to a "first functional entity" rather than merely a "functional entity", for distinction from the subsequently introduced "further functional entity".

Likewise, instead of a "zipping domain" comprising a "first part" and a "second part", we now recite first and second zipping oligonucleotides.

Paragraph (c) and (d) have been amended to conform to (b).

Paragraph (e) now makes explicit reference to steps (c) and (b).

3.1. In OA §5, the Examiner first questioned whether "the functional entity" on lines 5-6 of 1(c) referred back to the functional entity of 1(b) or to the "further functional entity" of lines 2-3 of 1(c). In claim 30, (b) refers to a "first functional entity" and (c) to the "first functional entity" or a "further functional entity", but there is no recitation of merely "the functional entity".

The Examiner also questioned antecedent basis for "the linker between the anti-codon and the zipping domain" in claim 19. The comparable new claim is claim 57, and the linker has antecedent in the first subparagraph of 30(c).

Lastly, the Examiner said that claim 1 did not provide antecedent basis for "the annealing temperature" in claim 20. The comparable new claim is claim 59. Claim 59 introduces "an

annealing temperature" so the antecedent basis is internal to the claim.

4. Claims 1-28 were previously deemed to be allowable over the prior art (OA §11). The table shown in §2 above compares new claim 30 to old claim 1, and we believe it makes it clear that claim 30 distinguishes the art in a similar manner.

5. Claim 29 drawn to a templated molecule per se, was rejected as anticipated by claim 1.

Claim 29 ("templated molecule") has been replaced by new claim 146 ("bifunctional complex"), which recites that the templated molecule is "further attached to at least two zipping oligonucleotides capable of reversibly dimerizing in an ordered way". This feature is not taught or reasonably suggested by Liu et al., either alone or in reasonable combination with the other prior art considered.

6. It is respectfully requested that the PTO correct the docket name for this case, which should be Pedersen9, not Pendersen9. See, e.g., the ADS filed September 10, 2004.

Respectfully submitted,

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